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Substitute for form 1449/PTO

INFORMATION DISCLOSURE STATEMENT BY APPLICANT

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Substitute for form 1449/PTO		INFORMATION DISCLOSURE STATEMENT BY APPLICANT			
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Sheet	1	of	14	Attorney Docket Number	
				Complete if Known	
				Application Number	10/578,402-Conf. #3013
				Filing Date	November 21, 2006
				First Named Inventor	Laurie H. GLIMCHER
				Art Unit	1633
				Examiner Name	Kevin K. HILL

U.S. PATENT DOCUMENTS

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Sheet	2	of	14	Attorney Docket Number	HUI-045CP2US

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	C1	Affolter, et al., "Nuclear interpretation of Dpp signaling in Drosophila," <i>EMBO J.</i> , Vol. 20(13):3298-305 (2001)	
	C2	Allen, et al., "Developmental anomalies and neoplasia in animals and cells deficient in the large zinc finger protein KRC," <i>Genes Chromosomes Cancer</i> , Vol. 35(4):287-98 (2002)	
	C3	Allen, et al., "Downregulation of KRC induces proliferation, anchorage independence, and mitotic cell death in HeLa cells," <i>Exp Cell Res.</i> , Vol. 260(2):346-56 (2000)	
	C4	Allen, Carl E. et al., "KRC controls cell growth by regulating the transcription of c-myc," Presented at the American Society of Biochemistry and Molecular Biology Annual Meeting, Washington, D.C., pg. A1391, Abstract No. 473 (1998)	
	C5	Allen, et al., "The kappa B transcriptional enhancer motif and signal sequences of V(D)J recombination are targets for the zinc finger protein HIVEP3/KRC: a site selection amplification binding study," <i>BMC Immunol.</i> , Vol. 22;3(1):10 (2002)	
	C6	Alliston, Tamara et al., "TGF-β-induced repression of CBFA1 by Smad3 decreases cbfa1 and osteocalcin expression and inhibits osteoblast differentiation," <i>The EMBO Journal</i> , Vol. 20(9):2254-2272 (2001)	
	C7	Anders, Hans-Joachim et al., "Murine Models of Renal Disease: Possibilities and Problems in Studies Using Mutant Mice," <i>Exp. Nephrol.</i> , Vol. 8:181-193 (2000)	
	C8	Angel P, et al., "Phorbol ester-inducible genes contain a common cis element recognized by a TPA-modulated trans-acting factor," <i>Cell</i> , Vol. 49(6):729-39 (1987)	
	C9	Arch, et al., "Tumor necrosis factor receptor-associated factors (TRAFs)--a family of adapter proteins that regulates life and death," <i>Genes Dev.</i> , Vol. 12(18):2821-30 (1998)	
	C10	Arias, et al., "Activation of cAMP and mitogen responsive genes relies on a common nuclear factor," <i>Nature</i> , Vol. 370(6486):226-9 (1994)	

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	C11	Arora, et al., "The Drosophila schnurri gene acts in the Dpp/TGF beta signaling pathway and encodes a transcription factor homologous to the human MBP family," <i>Cell</i> , Vol. 81(5):781-90 (1995)	
	C12	Bachmeyer, et al., "Regulation by phosphorylation of the zinc finger protein KRC that binds the kappaB motif and V(D)J recombination signal sequences," <i>Nucleic Acids Res.</i> , Vol. 27(2):643-8 (1999)	
	C13	Behre, et al., "C-Jun is a JNK-independent coactivator of the PU.1 transcription factor," <i>J. Biol. Chem.</i> , Vol. 274(8):4939-46 (1999)	
	C14	Behrens, et al., "Jun N-terminal kinase 2 modulates thymocyte apoptosis and T cell activation through c-Jun and nuclear factor of activated T cell (NF-AT)," <i>Proc. Natl. Acad. Sci. USA</i> , Vol. 98(4):1769-74 (2001)	
	C15	Bianchi, et al., "Integrin LFA-1 interacts with the transcriptional co-activator JAB1 to modulate AP-1 activity," <i>Nature</i> , Vol. 404(6778):617-21 (2000)	
	C16	Binetruy, et al., "Ha-Ras augments c-Jun activity and stimulates phosphorylation of its activation domain," <i>Nature</i> , Vol. 351(6322):122-7 (1991)	
	C17	Bishop, Jo, "Chromosomal insertion of foreign DNA," <i>Reprod. Nutr. Dev.</i> , Vol. 36:607-618 (1996)	
	C18	Blokzijl, Andries et al., "Physical and Functional Interaction between GATA-3 and Smad3 Allows TGF- β Regulation of GATA Target Genes," <i>Current Biology</i> , Vol. 12:35-45 (2002)	
	C19	Borden, et al., "The solution structure of the RING finger domain from the acute promyelocytic leukaemia proto-oncoprotein PML," <i>EMBO J.</i> , Vol. 14(7):1532-41 (1995)	
	C20	Bork, Peer, "Powers and Pitfalls in Sequence Analysis: The 70% Hurdle," <i>Genome Research</i> , Vol. 10:398-400 (2000)	

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	C21	Cameron, Ewan R., "Recent Advances in Transgenic Technology," <i>Molecular Biotechnology</i> , Vol. 7:253-265 (1997)		
	C22	Cao, et al., "TRAF6 is a signal transducer for interleukin-1," <i>Nature</i> , Vol. 383(6599):443-6 (1996)		
	C23	Castellanos, et al., "Expression of the leukocyte early activation antigen CD69 is regulated by the transcription factor AP-1," <i>J. Immunol.</i> , Vol. 159(11):5463-73 (1997)		
	C24	Claret, et al., "A new group of conserved coactivators that increase the specificity of AP-1 transcription factors," <i>Nature</i> , Vol. 383(6599):453-7 (1996)		
	C25	Cleland, Jeffrey L. et al., "Emerging protein delivery methods," <i>Current Opinion in Biotechnology</i> , Vol. 12:212-219 (2001)		
	C26	Cohn, et al., "Characterization of Sp1, AP-1, CBF and KRC binding sites and minisatellite DNA as functional elements of the metastasis-associated mts1/S100A4 gene intronic enhancer," <i>Nucleic Acids Res.</i> , Vol. 29(16):3335-46 (2001)		
	C27	Daga, Andrea et al., "Patterning of cells in the <i>Drosophila</i> eye by Lozenge, which shares homologous domains with AML1," <i>Genes & Development</i> , Vol. 10:1194-1205 (1996)		
	C28	Dai, et al., "The zinc finger protein schnurri acts as a Smad partner in mediating the transcriptional response to decapentaplegic," <i>Dev. Biol.</i> , Vol. 227(2):373-87 (2000)		
	C29	Deng, et al., "c-Fos transcriptional activity stimulated by H-Ras-activated protein kinase distinct from JNK and ERK," <i>Nature</i> , Vol. 371(6493):171-5 (1994)		
	C30	Denning, C. et al., "Deletion of the α (1,3)galactosyl transferase (GGTA1) gene and the prion protein (<i>PrP</i>) gene in sheep," <i>Nature Biotechnology</i> , Vol. 19:559-562 (2001)		

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	C31	Deonarain, Mahendra P., "Ligand-targeted receptor-mediated vectors for gene delivery," <i>Exp. Opin. Ther. Patents</i> , Vol. 8(1):53-69 (1998)	
	C32	Derynck, Rik et al., "Smads: Transcriptional Activators of TGF-β Responses," <i>Cell</i> , Vol. 95:737-740 (1998)	
	C33	Doerks, Tobias et al., "Protein annotation: detective work for function prediction," <i>TIG</i> , Vol. 14(6):248-250 (1998)	
	C34	Dong, et al., "JNK is required for effector T-cell function but not for T-cell activation," <i>Nature</i> , Vol. 405(6782):91-4 (2000)	
	C35	Dumitru, et al., "TNF-alpha induction by LPS is regulated posttranscriptionally via a Tpl2/ERK-dependent pathway," <i>Cell</i> , Vol. 103(7):1071-83 (2000)	
	C36	Durand, et al., "A 275 basepair fragment at the 5' end of the interleukin 2 gene enhances expression from a heterologous promoter in response to signals from the T cell antigen receptor," <i>J. Exp. Med.</i> , Vol. 165(2):395-407 (1987)	
	C37	Eck, Stephen L. et al., "Gene-Based Therapy," <i>Goodman & Gilman's The Pharmacological Basis of Therapeutics</i> , Ninth Edition, McGraw-Hill, Chpt. 5, pgs. 77-101 (1996)	
	C38	Gerlai, Robert, "Gene-targeting studies of mammalian behavior: is it the mutation or the background genotype," <i>Trends Neurosci.</i> , Vol. 19:177-181 (1996)	
	C39	Ghosh, et al., "NF-KappaB and Rel Proteins: Evolutionarily conserved mediators of immune responses," <i>Annu. Rev. Immunol.</i> , Vol. 16:226-260 (1998)	
	C40	Glimcher, Laurie H. et al., "Control of Postnatal Bone Mass by the Zinc Finger Adapter Protein Schnurri-3," <i>Ann. N.Y. Acad. Sci.</i> , Vol. 1116:174-181 (2007)	

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	C41	Górecki, Dariusz C., "Prospects and problems of gene therapy: an update," <i>Expert Opinion Emerging Drugs</i> , Vol. 6(2):187-198 (2001)	
	C42	Grieder, et al., "Schnurri is required for Drosophila Dpp signaling and encodes a zinc finger protein similar to the mammalian transcription factor PRDII-BF1," <i>Cell</i> , Vol. 81(5):791-800 (1995)	
	C43	Hicar, et al., "Embryonic expression and regulation of the large zinc finger protein KRC," <i>Genesis</i> , Vol. 33(1):8-20 (2002)	
	C44	Hicar, et al., "Structure of the human zinc finger protein HIVEP3: molecular cloning, expression, exon-intron structure, and comparison with paralogous genes HIVEP1 and HIVEP2," <i>Genomics</i> , Vol. 71(1):89-100 (2001)	
	C45	Himes, et al., "High mobility group protein I(Y) is required for function and for c-Rel binding to CD28 response elements within the GM-CSF and IL-2 promoters," <i>Immunity</i> , Vol. 5(5):479-89 (1996)	
	C46*	Hjelmsoe, et al., "The kappaB and V(D)J recombination signal sequence binding protein KRC regulates transcription of the mouse metastasis-associated gene S100A4/mts1," <i>J. Biol. Chem.</i> , Vol. 275(2):913-20 (2000)	
	C47	Houdebine, Louis-Marie, "Production of pharmaceutical proteins from transgenic animals," <i>Journal of Biotechnology</i> , Vol. 34:269-287 (1994)	
	C48	Humphreys, David et al., "Epigenetic Instability in ES Cells and Cloned Mice," <i>Science</i> , Vol. 293:95-97 (2001)	
	C49	Ip, et al., "Signal transduction by the c-Jun N-terminal kinase (JNK)--from inflammation to development," <i>Curr. Opin. Cell Biol.</i> , Vol. 10(2):205-19 (1998)	
	C50	Isakov, et al., "Protein kinase C(theta) in T cell activation," <i>Annu. Rev. Immunol.</i> , Vol. 20:761-94 (2002)	

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	C51	Jain, et al., "Nuclear factor of activated T cells contains Fos and Jun," <i>Nature</i> , Vol. 356(6372):801-4 (1992)	
	C52	Jain, et al., "Transcriptional regulation of the IL-2 gene," <i>Curr. Opin. Immunol.</i> , Vol. 7(3):333-42 (1995)	
	C53	Jochum, et al., "AP-1 in mouse development and tumorigenesis," <i>Oncogene</i> , Vol. 20(19):2401-12 (2001)	
	C54	Jones, Dallas C. et al., "Regulation of Adult Bone Mass by the Zinc Finger Adapter Protein Schnurri-3," <i>Science</i> , Vol. 312:1223-1227 (2006)	
	C55	Jones, Dallas C. et al., "Schnurri-3: A Key Regulator of Postnatal Skeletal Remodeling," <i>Adv. Exp. Med. Biol.</i> , Osteoimmunology, Interactions of the Immune and Skeletal Systems, Yongwon Choi, Ed., Springer, Volume 602, Chapter 1, pgs. 1-13 (2007)	
	C56	Jones, Dallas C. et al., "Schnurri-3 is an essential regulator of osteoblast function and adult bone mass," <i>Ann. Rheum. Dis.</i> , Vol. 66(Suppl. III):iii49-iii51 (2007)	
	C57	Kamei, et al., "A CBP integrator complex mediates transcriptional activation and AP-1 inhibition by nuclear receptors," <i>Cell</i> , Vol. 85(3):403-14 (1996)	
	C58	Kappel, Catherine A. et al., "Regulating gene expression in transgenic animals," <i>Current Opinion in Biotechnology</i> , Vol. 3:548-553 (1992)	
	C59	Karin, et al., "AP-1 function and regulation," <i>Curr. Opin. Cell Biol.</i> , Vol. 9(2):240-6 (1997)	
	C60	Karin M., "The NF-kappa B activation pathway: its regulation and role in inflammation and cell survival," <i>Cancer J. Sci. Am.</i> , Vol. 4 Suppl 1:S92-9 (1998)	

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	C61	Kuroiwa, Yoshimi et al., "Sequential targeting of the genes encoding immunoglobulin-μ and prion protein in cattle," <i>Nature Genetics</i> , Vol. 36(7):775-780 (2004)	
	C62	Lee, et al., "Activating protein-1, nuclear factor-kappaB, and serum response factor as novel target molecules of the cancer-amplified transcription coactivator ASC-2," <i>Mol. Endocrinol.</i> , Vol. 14(6):915-25 (2000)	
	C63	Lee, et al., "Steroid receptor coactivator-1 coactivates activating protein-1-mediated transactivations through interaction with the c-Jun and c-Fos subunits," <i>J. Biol. Chem.</i> , Vol. 273(27):16651-4 (1998)	
	C64	Lee, et al., "TRAF2 is essential for JNK but not NF-kappaB activation and regulates lymphocyte proliferation and survival," <i>Immunity</i> , Vol. 7(5):703-13 (1997)	
	C65	Leppa, et al., "Diverse functions of JNK signaling and c-Jun in stress response and apoptosis," <i>Oncogene</i> , Vol. 18(45):6158-62 (1999)	
	C66	Liberati, et al., "Smads bind directly to the Jun family of AP-1 transcription factors," <i>Proc. Natl. Acad. Sci. USA</i> , Vol. 96(9):4844-9 (1999)	
	C67	Lindsten, et al., "Regulation of lymphokine messenger RNA stability by a surface-mediated T cell activation pathway," <i>Science</i> , Vol. 244(4902):339-43 (1989)	
	C68	Lund, Anders H. et al., "RUNX: A trilogy of cancer genes," <i>Cancer Cell</i> , Vol. 1:213-215 (2002)	
	C69	Lutterbach, B. et al., "Role of the transcription factor AML-1 in acute leukemia and hematopoietic differentiation," <i>Gene</i> , Vol. 245:223-235 (2000)	
	C70	Macian, et al., "Transcriptional mechanisms underlying lymphocyte tolerance," <i>Cell</i> , Vol. 109(6):719-31 (2002)	

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	C71	Mak, et al., "KRC transcripts: identification of an unusual alternative splicing event," <i>Immunogenetics</i> , Vol. 48(1):32-9 (1998)	
	C72	Mak, et al., "The V(D)J recombination signal sequence and kappa B binding protein R _c binds DNA as dimers and forms multimeric structures with its DNA ligands," <i>Nucleic Acids Res.</i> , Vol. 22(3):383-90 (1994)	
	C73	Massagué, Joan et al., "Transcriptional control by the TGF-β/Smad signaling system," <i>The EMBO Journal</i> , Vol. 19(8):1745-1754 (2000)	
	C74	Matunis, et al., "Punt and schnurri regulate a somatically derived signal that restricts proliferation of committed progenitors in the germline," <i>Development</i> , Vol. 124(21):4383-91 (1997)	
	C75	Mondino, et al., "Defective transcription of the IL-2 gene is associated with impaired expression of c-Fos, FosB, and JunB in anergic T helper 1 cells," <i>J. Immunol.</i> , Vol. 157(5):2048-57 (1996)	
	C76	Moreadith, Randall Wade et al., "Gene targeting in embryonic stem cells: the new physiology and metabolism," <i>J. Mol. Med.</i> , Vol. 75:208-216 (1997)	
	C77	Moreau, et al., "Bone-specific expression of the alpha chain of the nascent polypeptide-associated complex, a coactivator potentiating c-Jun-mediated transcription," <i>Mol. Cell Biol.</i> , Vol. 18(3):1312-21 (1998)	
	C78	Mullins, John J. et al., "Transgenesis in Nonmurine Species," <i>Hypertension</i> , Vol. 22(4):630-633 (1993)	
	C79	Mullins, Linda J. et al., "Molecular Medicine in Genetically Engineered Animals," <i>J. Clin. Invest.</i> , Vol. 97(7):1557-1560 (1996)	
	C80	Murphy, et al., "Molecular interpretation of ERK signal duration by immediate early gene products," <i>Nat. Cell Biol.</i> , Vol. 4(8):556-64 (2002)	

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				First Named Inventor	Laurie H. GLIMCHER
				Art Unit	1633
				Examiner Name	Kevin K. HILL
Sheet	10	of	14	Attorney Docket Number	HUI-045CP2US

NON PATENT LITERATURE DOCUMENTS				
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	C81	Nakano, et al., "TRAF5, an activator of NF-kappaB and putative signal transducer for the lymphotoxin-beta receptor," <i>J. Biol. Chem.</i> , Vol. 271(25):14661-4 (1996)		
	C82	Ngo, J. Thomas et al., "Computational Complexity Protein Structure Prediction, and the Levinthal Paradox," <i>The Protein Folding Problem and Tertiary Structure Prediction</i> , Chpt. 14, pgs. 491-495 (1994)		
	C83	Oukka, et al., "A mammalian homolog of Drosophila schnurri, KRC, regulates TNF receptor-driven responses and interacts with TRAF2," <i>Mol. Cell.</i> , Vol. 9(1):121-31 (2002)		
	C84	Oukka, Mohamed et al., "Schnurri-3 (KRC) Interacts with c-Jun to Regulate the IL-2 Gene in T Cells," <i>J. Exp. Med.</i> , Vol. 199(1):15-24 (2004)		
	C85	Pearson, Helen, "Surviving a knockout blow," <i>Nature</i> , Vol. 415:8-9 (2002)		
	C86	Pessah, et al., "C-Jun associates with the oncoprotein Ski and suppresses Smad2 transcriptional activity," <i>J. Biol. Chem.</i> , Vol. 277(32):29094-100 (2002)		
	C87	Polejaeva, I.A. et al., "New Advances in Somatic Cell Nuclear Transfer: Application in Transgenesis," <i>Theriogenology</i> , Vol. 53:117-126 (2000)		
	C88	Rayter, et al., "p21ras mediates control of IL-2 gene promoter function in T cell activation," <i>EMBO J.</i> , Vol. 11(12):4549-56 (1992)		
	C89	Rooney, et al., "Coordinate and cooperative roles for NF-AT and AP-1 in the regulation of the murine IL-4 gene," <i>Immunity</i> , Vol. 2(5):473-83 (1995)		
	C90	Rothe, et al., "A novel family of putative signal transducers associated with the cytoplasmic domain of the 75 kDa tumor necrosis factor receptor," <i>Cell</i> , Vol. 78(4):681-92 (1994)		

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Sheet	11	of	14	Attorney Docket Number	HUI-045CP2US

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	C91	Rudinger J., "Characteristics of the amino acids as components of a peptide hormone sequence," <i>Peptide Hormones</i> , University Park Press, J.A. Parsons, Ed., Chpt. 1, pgs. 1-7 (1976)	
	C92	Rülicke, T. et al., "Germ line transformation of mammals by pronuclear microinjection," <i>Experimental Physiology</i> , Vol. 85(6):589-601 (2000)	
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	C94	Shi, Meng-Jiao et al., "CBFα3 (AML2) is Induced by TGF-β1 to Bind and Activate the Mouse Germline Ig α Promoter," <i>The Journal of Immunology</i> , Vol. 161:6751-6760 (1998)	
	C95	Sigmund, Curt D., "Viewpoint: Are Studies in Genetically Altered Mice Out of Control?" <i>Arterioscler. Thromb. Vasc. Biol.</i> , Vol. 20:1425-1429 (2000)	
	C96	Skolnick, Jeffrey et al., "From genes to protein structure and function: novel applications of computational approaches in the genomic era," <i>TibTech</i> , Vol. 18:34-39 (2000)	
	C97	Smith, Temple F. et al., "The challenges of genome sequence annotation or 'The devil is in the details,'" <i>Nature Biotechnology</i> , Vol. 15:1222-1223 (1997)	
	C98	Staehling-Hampton, et al., "A Drosophila protein related to the human zinc finger transcription factor PRDII/MBPI/HIV-EP1 is required for dpp signaling," <i>Development</i> , Vol. 121(10):3393-403 (1995)	
	C99	Sun, et al., "PKC-theta is required for TCR-induced NF-κappaB activation in mature but not immature T lymphocytes," <i>Nature</i> , Vol. 404(6776):402-7 (2000)	
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Sheet	12	of	14	Attorney Docket Number	HUI-045CP2US

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	C101	Takagi, et al., "Murine Schnurri-2 is required for positive selection of thymocytes," <i>Nat. Immunol.</i> , Vol. 2(11):1048-53 (2001)	
	C102	Torres-Vazquez, et al., "The transcription factor Schnurri plays a dual role in mediating Dpp signaling during embryogenesis," <i>Development</i> , Vol. 128(9):1657-70 (2001)	
	C103	Torres-Vazquez, et al., "Schnurri is required for dpp-dependent patterning of the Drosophila wing," <i>Dev. Biol.</i> , Vol. 227(2):388-402 (2000)	
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	C105	Ullman, et al., "Jun family members are controlled by a calcium-regulated, cyclosporin A-sensitive signaling pathway in activated T lymphocytes," <i>Genes Dev.</i> , Vol. 7(2):188-96 (1993)	
	C106	Verma, Inder M. et al., "Gene therapy - promises, problems and prospects," <i>Nature</i> , Vol. 389:239-242 (1997)	
	C107	Wajant, et al., "TNF receptor associated factors in cytokine signaling," <i>Cytokine Growth Factor Rev.</i> , Vol. 10(1):15-26 (1999)	
	C108	Wall, R.J. et al., "Transgenic Dairy Cattle: Genetic Engineering on a Large Scale," <i>J. Dairy Sci.</i> , Vol. 80(9):2213-2224 (1997)	
	C109	Wall, R.J., "Transgenic Livestock: Progress and Prospects for the Future," <i>Theogenology</i> , Vol. 45:57-68 (1996)	
	C110	Wallach, et al., "Tumor necrosis factor receptor and Fas signaling mechanisms," <i>Annu. Rev. Immunol.</i> , Vol. 17:331-67 (1999)	

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Sheet	13	of	14	Attorney Docket Number	HUI-045CP2US

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	C111	Weiss, et al., "Regulation of c-Jun NH(2)-terminal kinase (Jnk) gene expression during T cell activation," <i>J. Exp. Med.</i> , Vol. 191(1):139-46 (2000)		T ²
	C112	Wells, James A. et al., "Additivity of Mutational Effects in Proteins," <i>Biochemistry</i> , Vol. 29(37):8509-8517 (1990)		
	C113	Wu, et al., "IEX-1L, an apoptosis inhibitor involved in NF-kappaB-mediated cell survival," <i>Science</i> , Vol. 281(5379):998-1001 (1998)		
	C114	Wu, Lai-Chu et al., "The DNA-binding activity ability of HIVEP3/KRC decreases upon activation of V(D)J recombination," <i>Immunogenetics</i> , Vol. 53:564-571 (2001)		
	C115	Wu, et al., "The mouse DNA binding protein Rc for the kappa B motif of transcription and for the V(D)J recombination signal sequences contains composite DNA-protein interaction domains and belongs to a new family of large transcriptional proteins," <i>Genomics</i> , Vol. 35(3):415-24 (1996)		
	C116	Wu, "ZAS: C2H2 zinc finger proteins involved in growth and development," <i>Gene Expr.</i> , Vol. 10(4):137-52 (2002)		
	C117	Yanagimachi, R., "Cloning: experience from the mouse and other animals," <i>Molecular and Cellular Endocrinology</i> , Vol. 187:241-248 (2002)		
	C118	Yeh, et al., "Early lethality, functional NF-kappaB activation, and increased sensitivity to TNF-induced cell death in TRAF2-deficient mice," <i>Immunity</i> , Vol. 7(5):715-25 (1997)		
	C119	Zhang, et al., "Smad3 and Smad4 cooperate with c-Jun/c-Fos to mediate TGF-beta-induced transcription," <i>Nature</i> , Vol. 394(6696):909-13 (1998)		
	C120	Zhang, Ying et al., "Transcriptional Regulation of the Transforming Growth Factor-β-inducible Mouse Germ Line Ig α Constant Region Gene by Functional Cooperation of Smad, CREB, and AML, Family Members," <i>The Journal of Biological Chemistry</i> , Vol. 275(22):16979-16985 (2000)		

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Sheet	14	of	14	Attorney Docket Number	HUI-045CP2US

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